



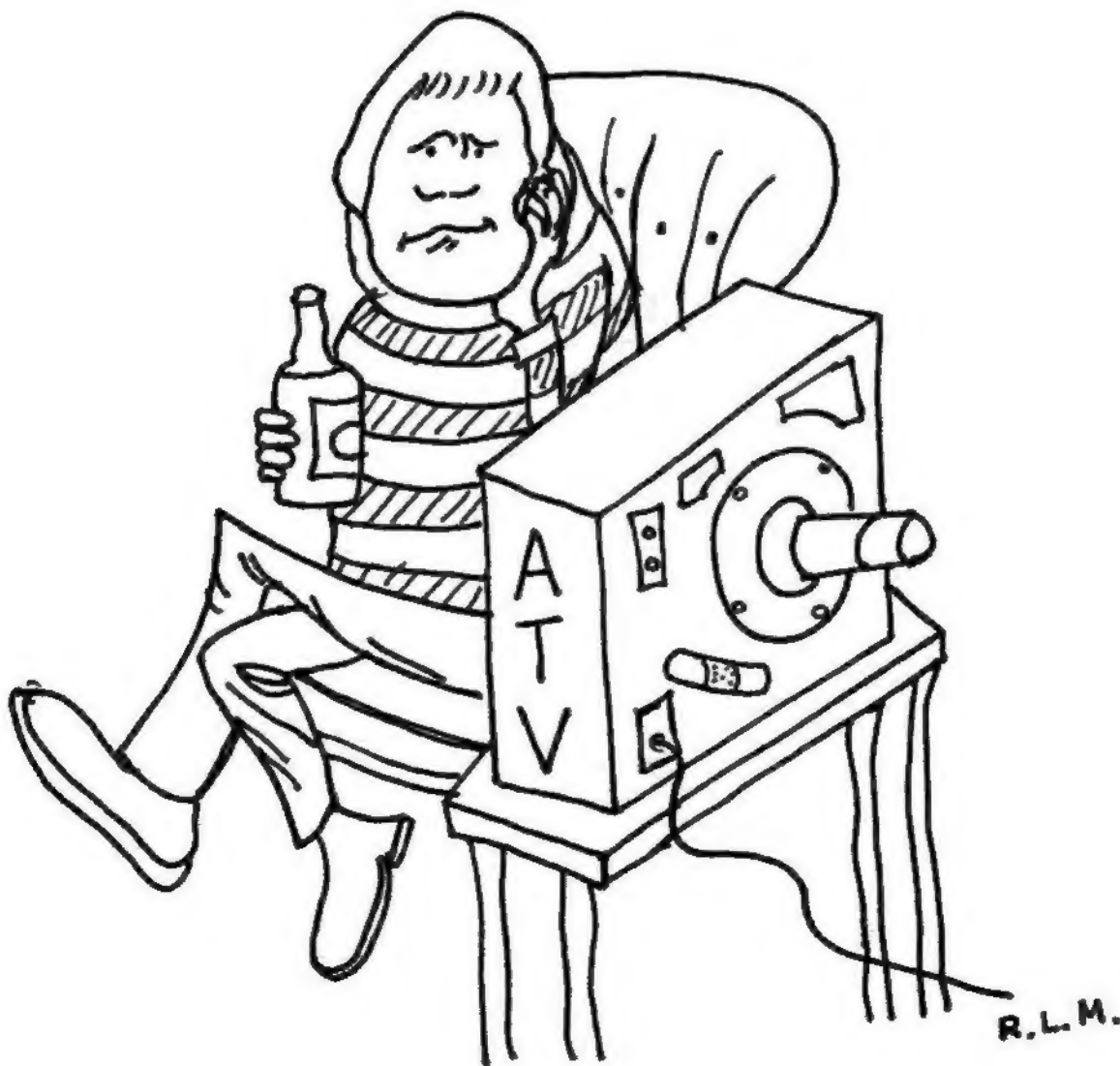
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VOL. XVII, NO. 2

ORANGE COUNTY AMATEUR RADIO CLUB

FEBRUARY 1976



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-- 1976 CLUB OFFICERS --

PRESIDENT	MARTIN RAYMOND	WB6PEX	532-4090
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	ERNIE FUERTE	WA6GXV	838-7017

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EDITOR	BOB MALLER	WB6AJV	832-6170
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Meeting: Third Friday of each month at Mercury Savings and Loan, 1095 Irvine Blvd, Tustin, CA at 7:30 pm.

Nets: Wednesday, 7:00 pm. 21.175 MHz CW, and 8:00 pm. 21.375 MHz, SSB. All stations are welcome to check in.

Breakfast: First Saturday of each month, 8:30 at Barnabys Coffee Shop, 144 S. Tustin Ave, Orange, CA (So. of Chapman).

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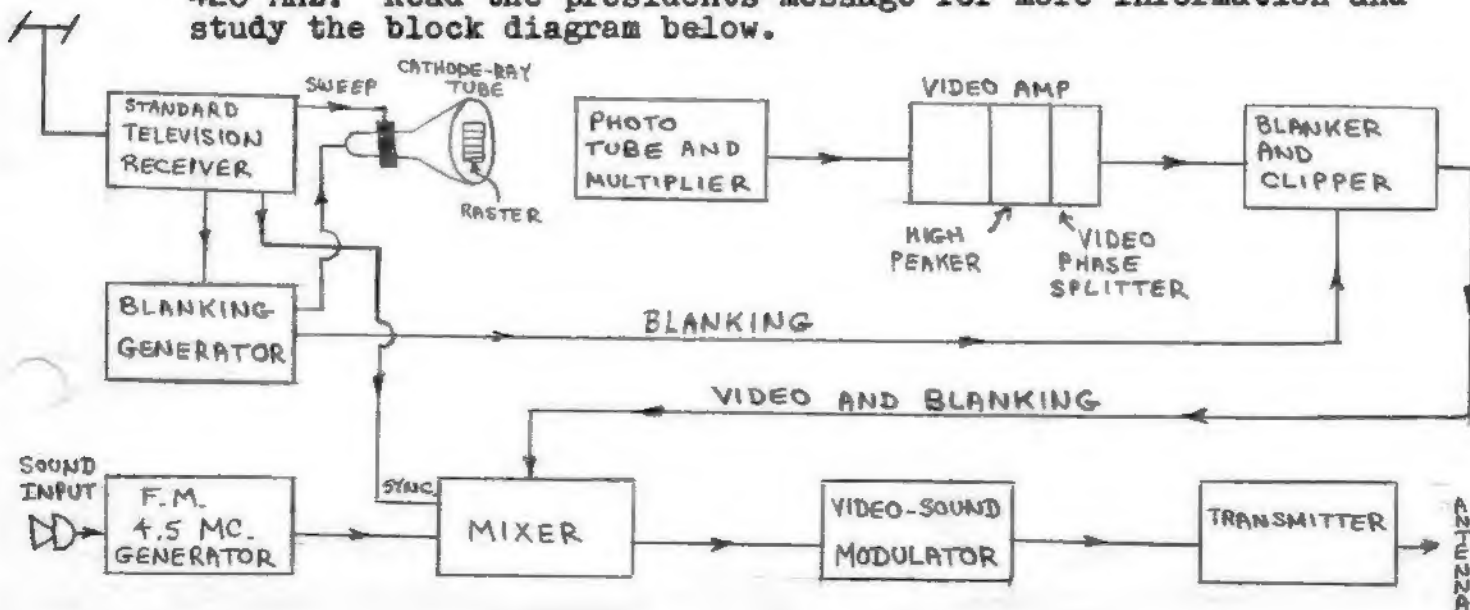
CALLBOOK SERVICE

The club has copies of the latest U.S. and foreign callbooks which are available at each meeting. Also you can contact Ken Konechy - W6HHC at home (541-6249) on Monday and Friday evenings between 7 PM and 9 PM if you need addresses. If you have more than one call for Ken to check, he'll get them all and call you back the same night. Also, you can usually catch Ken on the air after the Wednesday evening club net.

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THIS MONTH'S MEETING

Mr. Jim Proffitt, a Santa Ana College professor, will give a live demonstration of Amateur Television. This is not slow scan TV, but the stuff that goes on the frequencies above 420 MHz. Read the presidents message for more information and study the block diagram below.



## THE PREZ SEZ:

The nice turnout at our January meeting has the promise of a good year. In addition to our regularly attending members, we had a nice list of visitors and, hopefully, some new members among them. I am sure that our program on RTTY prompted the excellent attendance. It was most informative and interesting.

The officers' goal and efforts will be directed toward programs geared to be as interesting as we can make them in what we believe will benefit the club.

If you have a program in mind which you feel would be interesting, please notify Fried, WA6WZO. There are many avenues available -- nets, traffic handling, RTTY, DX, homebrewing, TV (slow scan and ATV) and many others.

I knew very little about ATV until I met Jim Proffitt, WB6FXG, an electronics instructor at Santa Ana College. After some conversation, he invited me to one of their club meetings (Southern California ATV Club) which I had attended out of curiosity. I met some very nice fellow-hams and asked many questions, all of which were answered in a very friendly manner. Summarizing their answers, I concluded that this was a mode which was not too expensive compared to some of our lowboard gear that could be a lot of fun. And, with proper knowledge, a willingness to do some building, some scrounging and a few bucks, it would be well within the reach of most amateurs.

With this information, I asked Jim, WB6FXG, to come to our February meeting with a demonstration and a general discussion as to how to get started -- techniques, how to obtain parts and expected costs. He has willingly agreed to do so. It does require a special effort on his part so I am hopeful that we will have a good turnout.

Our very capable ~~editor, Bob~~ WB6AJV, sez it's deadline!

So, "73's"

Martin, WB6PEX

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GONE BUT NOT FORGOTTEN

The FCC has moved. No longer does it occupy the position on the seventeenth floor of the Los Angeles Federal Building. No more will would be upgraders and would be amateurs sweat away hours of their lives in the clouds and smog. Instead it has dropped twelve stories and moved thirty miles south to Long Beach.

The FCC's new address is:

3711 Long Beach Blvd.  
Long Beach, Calif.

Look for the large, black windowed Keystone Bank Building. They are in Room 501.

But some traditions remain: exams are Wednesday at 9AM and 1 PM.

# SANDI'S CORNER

Ozzie - WB6PEW - has been busy compiling this important technical information for my column. So here goes:

Humprey's Law - If something can go wrong it will.

Parkingson's Law - Work expands so to fill the time available for its completion.

Wilbers Law - Nothing is impossible to the man who doesn't have to do it himself.

Kingle's Law - Once a job is fouled up anything can be done to improve it will make it worse.

McQuire's Law - Any improbable event which will create maxium confusion, if it did occur, will occur.

Law of Field Day - The chances of obtaining the maximum possible field day score is inversely proportional to its desireability.

WB6TBU - Frank O'Leary, a past member, is recovering from a heart attack. Hope you have a speedy recovery Frank.

W6NRS - Gene passed his EXTRA licence and we are all very envious. Congratulations Gene!!!!

Would like to wish Kei (W6NGO) a Happy Birthday. You may not have noticed but he is getting younger not older.

Which XYL thinks her crock pot is the greatest thing since Ham Radio. Her recipe for steak calls for half a can of beer, so she can start her steak dinner right after breakfast and also start her day with the other half of the can of beer. Try it, you may like it. I will have copies of the recipe at the next meeting if anyone is interested. Thanks to Irene, Frank's (WB6KJS) XYL.

Sandi, WA6WZN

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## MESSAGE FROM A NEW MEMBER

I see you at the meetings but you never say hello;  
You're busy all the time you're there with those you really know.

I sit among the members yet I'm a lonely guy,  
The new ones are as strange as me the old ones pass us by.

Darn it, you folks asked us in and talk of fellowship,  
You could just step across the room but never make the trip.

Can't you nod and say hello and stop and shake a hand?  
Then go and sit among your friends now that, I'd understand.

I'll be at your next meeting and hope that you will spend,  
The time to introduce yourself I want to be your friend.

Anonymous

Don't let this happen in our Club.



ULTRA-HIGH-SPEED TRANSISTORS - THE KEY TO  
COMPUTERS WITH THE ULTIMATE IN ECONOMY, SIMPLICITY,  
AND RELIABILITY

Recent investigations conducted by the Advanced Products Group have led to the development of a transistor with unusually high switching speeds. During a routine study of power accretion in diffused hypostable silicon crystals it was noted that, with current held constant at 1 milliampere, switching speed varied directly with voltage level of the input signal as follows:

<u>INPUT SIGNAL</u>	<u>SWITCHING SPEED</u>
+ 16 v	4 ns
+ 4 v	2 ns
+ 1 v	1 ns

The ratio of switching speed to input voltage is  $S=V^{1/2}$ . This relationship was not noted until the input voltage was accidentally reduced below the reference ground level. In this case, an input of -1 volt resulted in a switching speed of "1". Certain logical difficulties encountered at that point ruled out any practical application of imaginary switching speeds. However, development of the permastable multivibrator made further research feasible.

The research group was re-established, and soon discovered that further reduction of input voltage levels produced usable results. Switching speed again became a real value, but a negative value. With a -16 volt signal, for example, the transistor under test, switched four nanoseconds before the signal was applied.

The possibilities inherent in this effort were obvious, further investigations were conducted on a crash-priority footing. Much of the data resulting from these investigations remain proprietary, but the following general results can be revealed at this time.

A conventional add operation, using a 12-stage network can be performed in minus 8 nanoseconds. Furthermore, a simple feedback loop places the sum in the accumulator before the operand, thereby obviating the necessity of accessing this operand in the first place, thus saving even more time. However, it is in the case of multiply, divide, and similar more complex operations that speeds become truly remarkable. In at least one case, the result appeared on the output device before the problem had been coded. In fact, with computer logic operating in minus time and memory storing future data, it is foreseen that the major efforts of programmers will be devoted to constructing questions to go with the answers.

Production of these hyper-speed computers will doubtless have a profound effect on marketing techniques and philosophy, if answers to customer problems are produced before the computer is installed, special sales and rental agreements will certainly be necessary.

However, efforts are now under way to increase operational speeds to the point at which all results will be presented before the computer exists. With no need to design, construct, or debug the machines, the manufacture of computers can be expected to achieve new heights of economy, simplicity, and reliability.

Submitted courtesy of: Don Klos W6OOH

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## QSL PRINTER SURVEY

Listed below is the pertinent information from eleven QSL printers. The prices shown are for 200 and 500 cards in one, two and three colors on white card stock only. Colored card stock, if available, may cost slightly more. The postal rates shown are for 200 and 500 cards respectively. Absence of postal rates indicates postage is included in the price. One postage rate indicates a flat charge for postage per order. No entry in the NO CUTS column means no large sample of cuts is available.

Due to the Bicentennial call signs printers are swamped with orders and longer than usual delays can be expected before your order is printed.

NAME	CARD COLOR	NO CUTS	PRICE		POSTAGE		
			COLOR	200	500	200	500
Petty Printing Co. P.O. Box 5237 Trenton, NJ. 08638	Black		1.	8.35	13.50		
	White		2.	10.50	17.95	1.25	1.50
			3.	12.95	22.75		
W9SKR Press 100 Wilson Road Ingleside, IL. 60041	White		1.		7.15		
			2.	4.90	8.85	.35	
			3.	5.85	9.95		
W1NZJ Press 454 Proctor Ave Revere, MA. 02151	White		1.	7.20	11.50		
			2.	9.20	14.50	1.05	1.85
			3.	10.50	17.60		
The W9CL Press 15525 Oak Road Carmel, Ind. 46032	White		1.	8.25	18.00		
			2.	11.25	21.00	.70	1.85
			3.	14.25	24.00		
Nicholas & Son P.O. Box 11184 Phoenix, AZ. 85061	White	50	1.	8.95	14.50		
			2.	9.95	17.50	1.50	
			3.	10.95	19.95		
Alkan Products Box 3494 Scottsdale, AZ. 85257	Many	Many	1.	6.00	11.85		
			2.	7.00	13.75	1.75	2.47
			3.	8.25	17.25		
3-D QSL Monson, MA. 01057	Many	Many	1.	9.20	19.95		
				(One color only)			
Corneilson's 321 Warren St. N. Babylon, NY. 11704	Many	300+	1.	7.00	13.50		
			2.	10.00	18.00		
			3.	13.00	22.50		
Wilkins Printing P.O. Box 787 Atascadero, CA. 93422	Many	Many	1.	7.98	10.85		
			2.	10.80	17.16	.88	1.05
			3.	13.68	21.84		
'BROWNIE' W3CJI 3035 Lehigh St. Allentown, PA. 18103	Many	Many	1.	10.25	19.25		
			2.	11.50	21.25	.60	1.50
			3.	12.75	23.25		
Ritz Print Shop 5810 Detroit Ave. Cleveland, OH 44102	Many	Many	1.	7.00	11.25		
			2.	8.50	13.50	1.50	
			3.	10.25	16.75		

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## REPORT OF ANNUAL FINANCIAL AUDIT - CALENDER YEAR 1976

## I. Club Receipts

Dues from members	\$ 372.00
Monthly raffle	386.25
Auction sale profit	73.85
Christmas raffle	213.67
Misc.	9.65
	<u>\$1055.42</u>

## Club Expenditures

Monthly raffle	\$ 272.32
Stamps for R.F.	121.10
Donuts and coffee	110.09
Orange County fair	16.00
Insurance	93.00
Field Day	150.76
R.F. cover paper	150.20
Christmas raffle	187.94
Christmas party	100.00
Misc.	28.53
	<u>\$1229.94</u>

## II. Checking Account

Balance on Jan. 1, 1975	\$ 138.21
Plus annual receipts	1055.42
	<u>\$1193.63</u>

Less annual expenditures  
(payment of one bill from  
xmas raffle for 104.94  
deferred to 1976)

1125.00
<u>\$ 68.63</u>

Adjustment to correct error	<u>.05</u>
Balance on Dec. 31, 1975	\$ 68.58

## III. Savings Account

Balance on Jan. 1, 1975	\$ 557.93
Interest for 1975	<u>30.08</u>
Balance on Dec. 31, 1975	\$ 588.01

Prepared by Audit Committee  
Jan. 8, 1976

Chairman - Harold Richards, WA6BJO  
Ted Glick, K6LJA  
Rodger Denny, WB6ARK  
Frank Gregg, WB6KJS

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A REMINDER FROM THE TREASURER

Please note this extract from the club By Laws:

"Non payment of dues by the end of the first quarter  
constitutes forfeiture of club membership."

Pay your dues early and do not jeopardize your club  
membership, your listing on the spring roster or  
your receipt of the R.F. monthly publication.

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ANSWERS: PUZZLE CORNER in the January R.F.

1. Series and Parallel Resistances
2. Impedance
3. Transistors

"RF"

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FOR SALE CORNER . . .

WANTED: To buy, cash trade or whatever

Linear Tubes - 4-400A, 4-1000A, 3-400Z

Tower & Tri-band Beam

Contact: WB6JTZ Bryan McCoy

714-539-8308

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FOR SALE: ICO MODEL 666 Tube and Transistor Checker.

\$ 39 - Proceeds go to the Club.

Contact Fried Heyn - 549-8516

ORANGE COUNTY AMATEUR RADIO CLUB, INC  
POST OFFICE BOX 95  
ORANGE, CALIFORNIA 92668

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FIRST CLASS MAIL !!!

DATED MATERIAL !!!